## Symposium II

## Justin Draeger

Thank you, Toots for that introduction. It's a pleasure to be here with you today. I do feel very passionately about this. This is something that I've spent almost my whole career, and many of you are probably thinking "well, how long could that possibly be?" I have been in financial aid since 2002 and ever since I got into financial aid, one of the first things I did was notice that perhaps our students were going out with not all their needs being fulfilled. I worked at a trade school like Toots mentioned. The trade school was giving them the right tools and skills to go out and be able to start their careers but we noticed that they were having troubles sometimes paying back their loans. And, especially at a small school like ours, when you have just a handful of students that default on their student loans, that's a big deal to us. So, it was something that I got into very early.

It is also a pleasure to be here with Dr. Baum this morning. In many ways, I feel I am a warm up act for you and so I appreciate being able to share the stage with you today.

I asked Toots to round up ten volunteers. So if you are one of the ten volunteers, I don't know who you all are, would you please make your way forward right now. You will be on camera, so no pressure. I am going to ask you to come right over here to my left.

Ok, I wanted to try to illustrate something to you with these ten people, a few statistics that maybe you were aware of or maybe you weren't aware of. I want to show you the progress that we have made in Default Aversion over the last 10 – 15 years. In 1992 the Cohort Default Rate was above 20 percent. So, we are going to take Sue and Stephanie...these are our defaulters in 2002, and all of these borrowers were in good standing. In 1996, that rate went down to just under 10 percent so Sue, you can come back and Stephanie, you are our loan defaulter out there; one out of 10 people.

Then we come up to 2002 and then we were around 5-6 percent. So, if Stephanie (and I'm not going to ask you to do this) we could cut her in half and half of her would be here and half of her would be over there. That would be one half of one person out of ten people so that's tremendous progress, I think. When you look over the last 15 years to keep cutting in half from 1992 to 1996 and 1996 to 2002. That's commendable but there is another side of that story that sometimes we don't look at.

In 1996, if instead of looking at the Cohort Default Rate, we look at the entire portfolio. So, we took all the borrowers who are in repayment, the entire portfolio, about 20 percent.....it's actually 17.9 percent, 18 percent.....so, we are back to two out of every 10 people out of the entire portfolio were in default in 1996. That's compared with under 10 percent which was the published Cohort Default Rate during that period.

Then, let's take it to 2002. And like I said, in 2002 the published Cohort Default Rate was 5 -6 percent. The entire portfolio rate was still around I4-15 percent. So, that would be half of Sue, still in default. I think that is indicative of two things: I think it shows that we are very good at complying with the law. Because we are measured as schools, on a Cohort Default Rate, a snap shot. Two years ago and we made good progress there and I don't want to diminish that. That's good work. But there is

something happening along the way that students are still defaulting later on and that is something that needs to be addressed for our students' benefits who we're trying to help.

Let me show you something else here. Let's say that all 10 of these people are borrowers and I'll take you Rick, and single you out and put you out here. We're going to say Rick represents a student, who no matter what you do will not pay back his loan, period! He doesn't feel he got the education he needed, he withdrew from school. Unless you pay his bill for him, he's a defaulter through and through; he's just not going to pay it, period! We are going to take you 5 people; .....slide to the right a little bit....these are stalwart and true people who will repay, no matter what. They are the people that even if they get miss-billed, extra, they are still going to pay. These are the people that pay extra on their principle. Yes. Scott, he's so good that, he gets charged extra, he doesn't care; he's going to pay it anyway. He's just that responsible.

What we have here in the middle, these are the students that if things work out ok for them, they could end up over in this camp. If things go wrong for them, things don't turn out just right, they could end up over in this camp. What we are getting at today with our research methodologies and trying to better understand our students is find out who these students are, right here. These students might not need our help and if you have the resources to help them or provide them with additional information, great. Perhaps we don't always want to spend time with the people who, no matter what you do, they're not going to pay back their loans. I'm not saying write them off, just saying that what we are trying to identify are these people... the things just don't work out, they had the intention to pay back their loan but it didn't work out. This is what we are getting at today. Thanks for helping. Thanks. (Volunteers exit stage)

Ok, alright, so let's talk about what we are trying to do here today: our goals and expectations. This is not going to be a statistics class. I'm not going to go over in-depth statistical analysis, in-depth research methods but we are going to go over some basics. We are going to hopefully, stimulate some research ideas that we can flesh out in the breakout sessions. We are going to be talking about what is going on in the financial aid community around default and default aversion.

So let's first talk about the default landscape right now. I am not going to talk a lot about the college boards statistics, from the college boards, but I will say that as we probably all know from the latest trends, that students are relying, having to rely on more and more loans, and specifically private loans which we have seen a dramatic increase. We have no way of even measuring credit card debt, really, and so we don't really know what is going on there either but we assume that by and large students are having to rely more on student loans, and so our responsibility to help them is even greater. I just gave you those statistics right there for 1996, 2002 cohort default rates and then the portfolio default rates. You know there is a research project that was just released. It was entitled *Student Borrowing In America: Metrics, Demographics, and Default Aversion Strategies*. The author took a survey amongst financial aid administrators and found that 80 percent, excuse me, more than 80 percent of the financial aid administrators that he surveyed wanted a better way to measure their default aversion strategies besides the cohort default rate that we currently use.

I probably need to say right now, that I work at NASFAA, but not all the opinions that I espouse are necessarily the opinions of NASFAA. So some of the things I am saying are Justin, who works at NASFAA, since this is being taped, I felt that I should say that.

There is a problem with the cohort default rate as I just showed you earlier. It does not really capture the entire picture and I am not here to mince about how much a school is responsible for and how much the school is not responsible for. But there are two problems with the current cohort default rate, as I see it.

First of all, a recent report just came out from NCES last week (National Center For Education Statistics) that showed that highly selective schools who serve low numbers of low income students, have better graduation rates than schools that have open enrollment and serve high numbers of low income students; probably not a shocker but it has been shown now through the research project that they have just completed. My point is that schools serve different students and to group all schools together into one big snapshot does one thing, it lifts schools who serve, perhaps, a high number of low income students with open enrollment. We know there is some correlation between withdrawing from school and defaulting. We might not know how strong that correlation is but there is some relationship there. So, schools that have perhaps a non-traditional student body, who have a lot more withdrawals than perhaps another school, they are held up here. They are always highlighted when you look at cohort default rates. I am talking about community colleges here, propriety schools. They serve a different student body and then you have the schools that traditionally have the 3, 4, 5 percent cohort default rates. Sometimes they are looked over...they are allowed to skate. Now I am not advocating what the solution here is; I am saying is that perhaps there is a new way, a better way and that is the discussion that is going on in the community about measuring cohort default rates. Whether it is grouping schools together, whether it is looking at 4 years as opposed to 2 years, these are all different things that are all just up in the air right now. One thing is for sure, if we looked at a 4 year cohort default rate, or a life of a loan cohort default rate, right now we have a 25 percent ceiling on what your CDR can be. If we looked at a 4 year life of a loan that would pretty much eliminate most community colleges and propriety schools from being able to participate in Title IV. I am not saying that to say there is something wrong with community colleges or propriety schools; those are my roots, that is where I come from. They serve a different student body and we have to find a way to better make schools accountable based on the students they serve. We also are looking at dollars that are being tracked and Toots talked about this earlier with the department's new initiative....and so these are all things that are going on right now and all the discussions that are happening in the community.

Let's take a look here at two different schools. University X has a default aversion plan and what they want to do is implement it campus wide. They want to get all of their borrowers in this new default aversion plan. Then we have University Y, and what they want to do is choose a select group of students based on research that they have conducted, our middle group up here, and they want to target their default aversion plan to them first. Two different out comes with these schools. University X ....there are two things that I have noticed here, if you have a school and you have a great new program and you try to implement it campus wide, I have noticed two different things, 1), it either never really starts because it is just so big that how do you get to all of your students at

once or 2), it never reaches the capacity that you want to get to, it just kind of limps along. University Y is a different outcome. If you start with a select group of students, the students that you have identified who really need it based on your own research or observations, then you can measure how well it is working and then expand it as you see fit. That is what we are getting at today.

So what is research? Simply, it is just the simple act of carefully observing some thing, situation, or phenomenon in order to learn something more about it and better understand it. I love the show Myth Busters and so I thought I would go through a few today about research. Myth #1 I need to be an expert in to do any type of research effectively. Well, that's not necessary true. We do research every day whether it is with our spouses or children to learn what their likes or dislikes are or to what is acceptable behavior at work.

I asked MGA, who is hosting this today, to do some research on you. We have some interesting things here that they have compiled that I will share with you. Is Diane Fleming here? Ok, we've done some research on you and found that there is a correlation between Diane's happiness and the availability of chips or pretzels. So we are providing Diane this morning with some chips and Toots is going to get that right now and we are going to sprinkle some happiness and hope that that correlation holds true! The salt block... just keep providing you with salt? Ok. Stephanie Petsch? Ok, we have done some research on you and we found another relationship between your level of happiness and the availability of popcorn. So we've got some microwave popcorn here for you now we didn't find out if that is necessarily at 9:00 in the morning but we have popcorn for you. Roger Miller? Is he here?? Maybe?? Ok. And, Daisy Cordero, are you here? Ok, Daisy and Roger both enjoy hard candy. So we are providing you two both with hard candy today. What about Karen McDowell? Is she here? Karen, this was an interesting one....enjoys strawberry or orange crème savers. So, there you are, those are for you. Douglas Gilbertson, are you here today? Yes. There you are. Enjoys fruit? ... So we've got an orange, I think, right? And, an apple. There you are!

The point I am making here is that research doesn't have to always be so in-depth. It can be personal observations. What is it about your students that make them unique, what are your hunches, what are your questions about them? I mean, they come in your offices, obviously you must know something about them already. Every time we complete a survey, respond to some request for information from another office or any time we assess how regulatory or legislative change will affect our programs....that is research as well. I want to point out that we are already doing it. This is something that perhaps you didn't realize but it is already happening on your campuses. But we want to talk about taking that to the next step.

I need to be an expert to do any type of research effectively. That's not necessarily....this goes back to the last myth, that's not necessarily true but you do have to have a basic understanding of how research works: how to start a research project, how to find and collect data, analyses the data and publicize those results.

Next myth: I don't have the time to conduct any research. It seems especially with two new grant programs that just came out, more and more is being required of Financial Aid Administrators and as has been shown by the department, they are not giving you

any additional administrative cost allowance or any additional resources to complete those things that you have been asked to do. So, you don't have a lot of time but some of the simplest research can be done in a short amount of time. For instance, you were all given a survey, I think, when you walked in. Just to show you how fast we can do some analysis on you, I am hoping, I am going to ask that if you haven't completed it, do it now. It will take just 15 – 30 seconds and then Ross and a couple of other people, Flora, and Janet are going to come around and collect those surveys right now.

You know, we don't have a lot of time in our offices to conduct research but it is important to know that others are out there to help you. Toots talked about this earlier. In this state right now, in Michigan, I know that Great Lakes has provided a survey for financial aid administrators to fill out with existing data that you have on your campuses. That you can do a simple analysis or Great Lakes will do a simple analysis for you to help you just get some descriptive statistics about your student population. MGA is also doing research projects intermittently with schools throughout the state. The one I am familiar with is with Eastern Michigan and we will talk a little more about that one in a bit. But there are guarantors, lenders, non-profit organizations in the state who are willing to help you.

There are also people on your own campuses that are willing to help you. Graduate students, if you have graduate students at your school, professors who are looking to publish. You know, financial aid has a publishing source, *The Journal of Student Financial Aid* and even if you don't want to publish in it, that doesn't mean that there aren't professors on your campuses who wouldn't be interested in publishing in it or graduate students, for that matter. If you are at a community college or propriety school, reach out to the nearest 4 year school or graduate school. They are looking for ways to research and publish and your students might provide them with an avenue.

Rick was telling me about a project at MSU with their migrant, children of migrant workers who were leaving MSU and they didn't exactly know why, so they implemented, this was throughout MSU, they implemented a program to try and find out and research why these students were leaving. They found some interesting results and Rick, you can correct me if I am wrong here or jump in but basically some of the things they found were: some of them felt guilty for not working and being away from their family and so they went back closer to be with their family. And some enrolled in schools that were closer to their families. That is important because that doesn't mean those students are necessarily withdrawing and failing from MSU. It means that they are leaving MSU and finding success elsewhere. That is important, that's important when looking at your student population. So my point is there are a myriad of people who will help you do this research and look at your students if you just reach out to them with your questions and show them the opportunities.

Ok, we don't have the resources to do this. There are all sorts of preexisting data that you can use and I am not going to...some of these are hotlinks. I just want to show you a couple of them. The first one here is the NASFAA Annotated Bibliography of Student Financial Aid. We will see if this works. Ahem....ok, I am just going to go on. You can check these out and, in fact I have provided in your packets a monograph, it's one of the tabs, I think. It is called *Research Tools, Tips, and Resources for Financial Aid Administrators* and that contains a complete list, a tabular list, of all the existing data sets that are out there for you. In this case, on NASFAA's site you can go out and

choose a key word or whatever else you like. I am just going to type in *default* ...I'm going to hit *submit* and what it will pull up for you are all sorts of research projects that have been conducted on whatever subject you are looking for, just tons and tons of them...pages. They are in order of publication year and so if you are wondering what has already been done out there...a lot. You just have to find what is interesting to you.

MGA also has a default aversion database. When you are going out and are looking for materials to implement default aversion plans, sometimes you are just overwhelmed by the amount of things that are out there and financial literacy, budgeting, credit card use. What MGA has attempted to do is they have compiled this data base where you go through and find a topic of interest for you and you can select it and it is not necessarily MGA material, it's material from other sources. You can come out here and for example, Kira's credit, Kira's life, Kira's choices...this is a Great Lakes product but what MGA has attempted to do is compile this for you so you can come to one place and by subject find what it is that you are looking for.

I just mentioned the US Department of Educations' National Center for Education Statistics. They have a *What's New* page that you can subscribe to and it will tell you new research projects that come out .... probably about every 2 – 3 weeks. And then, of course, The College Board: Trends in Student Aid, Trends in College Pricing, Annual Survey of Colleges which Dr. Baum will talk about later. There is the Pell Grant End of Year Report, Federal Loan Volume Update, and NASGAP has a Survey Report they release. The point of this data, in some ways, is just to look at what you are dealing with on your campuses.

The other reason this is useful is, you can look at this data and you can see what some national averages are, sometimes you can even get into subsets and you can just look at, for example, what community colleges are doing or proprietary schools and then you can look at your own student population and say, are my students different from the national averages out here? Do we have less loan debt than most community colleges? Do we have more loan debt? Do we default more? Do we default less? And then question why. Then formulate some sort of research project based on that. We are different from everyone else. What is that is going on on our campus, what is unique. That's if it is good or bad.

But research and statistics can be so boring. No, research is exciting! I am sure I have convinced you with that one line. Yeah. I am not going to go through all the exciting research projects that are out there. I know I am biased because I love it. I devour it. But it is exciting. I do want to make a point on this slide though. Whatever research we conduct or read, we have to make sure...we have to be careful not to make our numbers or research projects into something they are not through hysteria or hype or something, jumping to conclusions that are not substantiated by any real numbers.

Let me give you an "out of financial aid" example here. Let's say you have a child......a 6, 7, 8 year old child and they have a good friend and the friend comes from a nice family with a swimming pool, a dog, and 2 1/2 children. Just a great family, nice house but you also know the dad is an avid gun collector.....has weapons in the home. How many of you would have trepidation sending your 6, 7, 8 year old child over to that home? Ok, I would. I have a 3 year old girl and I have trepidation every time she walks the stairs by herself. I would have some trepidation but there is.....I mentioned in the story that they also have a swimming pool. In the United States the odds of dying in a

swimming pool accident, are 1 in 11,000. You know what the odds are of dying in a gun accident? 1 in 1 million. The reason I point that out is we are all so afraid of the weapon and it is based on a fear, I mean, you know, gun control is a hot topic. We are all familiar with it. And so that is what we focus on, even though the odds really aren't there to substantiate perhaps any real concern. A swimming pool, there is no hysteria about swimming pools, nothing exciting about a swimming pool. It is a swimming pool but we have to look at the data and let the numbers tell the story.

And when we bring that back into financial aid that means we can't over play what it is that we are researching. We can't over hype what we are doing. If we find that there is a correlation between students that withdraw at our schools and students that default, can we jump to the conclusion that students that withdraw don't care about their loans? No. That is not substantiated by that research. We don't want to over hype it for forever reason.

Numbers can be exciting on all on their own. This is another non-financial aid example, but does anyone recognize this picture? How many people were around in 1969? You don't have to....Ok, I wasn't ... but this photo was taken December 1, 1969, it was the first lottery of the Vietnam draft.....(Laser pointer, don't have... must of misplaced it)..... that bin down there where he is reaching into, that is 366 balls with numbers on them from 1 to 366. These represented birthdays, so these represented days of the year. If they pulled one out, and for example, the first one they pulled out was 258.... that corresponded to September 14 and if you were eligible for the draft and your birthday was September 14<sup>th</sup>, you were placed in the first draft and then they would reach in and pull out another, you went into the second draft and so on and so forth.

Someone actually plotted this data and down here at the bottom, these are your birthdays, starting January 1 all the way through December 31. These are the drafts from the first draft all the way up to the 366<sup>th</sup> draft on this lottery, this particular lottery. This blue line right here, that represents the 195th draft right there of this lottery. Everybody below that blue line was drafted for Vietnam. Everyone above.....it didn't go above 195 for this particular lottery. They had other lotteries in subsequent years. What do you notice about January? What were your odds of going to Vietnam if your birthday was in January? Pretty slim. What about if your birthday was in December? Yeah, a little bit greater. What they discovered when they looked back on this project, it wasn't completely random. That the balls back here weren't totally mixed. They weren't mixed well enough so when they would reach in, they were pulling out .... And they did an analysis on this they showed that this was a statistically significant difference meaning that you can't chalk this up to probability. That it was statistically significant. That's a big deal. That doesn't need hype...that is exciting all on its own. You don't need to hype that up and we shouldn't do that on your research projects. Just as an aside for those of you that are curious about this type of thing. What they should have done and what they did do in later years was they should have had 2 bins so that it was a double blind experiment or double blind sample. So they should have had the birthdates in here mixed well then drafts over here mixed well. So you would pull out a birthday and then pull out a draft number so that it was totally random instead of just about going in order.

Ok, how many of you recognize this quote? It says: "you should know the truth about financial aid offices. They're supposed to help you choose the best lenders. But in

reality, they may steer you towards lenders that benefit them. Not you. Unless you check for yourself, how do YOU know you're getting the best loan?" I am not here to make any type of statement about My Rich Uncle that ran this ad. I am not here to talk about their marketing which may or may not be good. I am not here to talk about their product. I am here to point out one simple thing which is an accusation was made in this ad about financial aid administrators which was totally unfounded. It wasn't based on any research, that's hype. That's not the truth. In every industry and perhaps even our own, you have a couple of examples of unethical behavior. That doesn't categorically make financial aid administrators unethical. You have to be careful that any type of research we do we don't try to over hype it or make it into something it is not or draw wide conclusions from it.

The difference between formal and informal research: Formal research consists of a hypothesis,

a literature review, collecting data, analyzing data, acknowledging our limitations, making inference, correlations, conclusions, and finally seeking publication. Informal research is used internally. By and large, it may contain all the same steps as formal research but just with perhaps a few looser parameters. Which one you want to use is really up to you. But if you were going to conduct an informal research project on your campus, first thing you would want to do is to come up with questions.....questions about your student population. For example, well....let me do this real quick. I want you to do this for a minute. Record some questions that you might have about your students. Why do they act a certain way? Any observations about your students that you can come up with real quick. Just take 60 seconds and see if you can come up with some questions about your students.

Ok, I want you to bring those questions with you to the breakout sessions later today because we are going to talk about some of those. Anybody feel like they want to share a question they have right now? Ok, we will wait for the breakout session. I have tons of questions. I have often wondered.....it seems to me that when people default, they fall into one of three or four groups. One is, you have the students, I have noticed, that go into repayment, never contact their lender, go to the 270 some days and then just default. No body knows who they are, where they are, what's going on with them, they just go into default. Then you have the students that make intermittent payments, they might make a payment here or there and then they default. Then you have the students who go along just fine and then perhaps default in the future. My question is what is the difference between those students? What's going on there that makes those students different? What is it about the student who just falls off the face of the earth and then defaults? Can we identify those students earlier? Those are questions that I have that I have yet to answer. But questions like that, observations you can make.

Let's talk about some statistical basics. I am not going to get into HOW you do statistical analysis. I am going to point out some things and hopefully you will take note, mental note, or written note about what you can do or what is possible and if you are interested in looking more into that, you can contact me directly, I can point you in the right direction or I can put you in touch with people who I know are out there in the industry doing research on some of these topics and perhaps you can hook up with them and they might be able to work with your students on your campus.

The first thing I want to talk about is how you find the people you are going to study. Some times we do not have the resources to look at an entire student body or all of your borrowers over the last 10 years or so. What you do is find a sample and it should be a random sample. That means gives every member of the population an equal chance of being selected. How many of you have filled out a survey at a restaurant? Anybody? A lot of people, ok. Peggy, I saw that you raised your hand. Can I ask what it was that you put on the survey to the restaurant? What was the general....your take on the restaurant? Ok, and how was the service?? Ok....ok...usually when you fill out a survey at a restaurant it is because you feel one of two ways, it was the greatest restaurant in the world or it was sub par. Not many people who are just satisfied fill out a survey. I have included something in your packets here that actually talk about how to survey your students if you want to do a survey and the appropriate way to do a survey and what kind of questions you want to ask when you do a survey. This is from a student transcript article that NASFAA publishes. It is a recent one at that, so that is included but we want to make sure that it is actually random. You know I never fill anything out unless I am really happy or not at all happy. So if we were going to do that we would find at the restaurant they may think that people either love us or hate us. But that's not really the truth. There could be tons of people who think you are fine ... just don't fill out a survey.

There is another thing that you have to be careful of with samples and not make sure that they are too small. If I take out a coin and flip it 3 times and 2 times it comes up heads. Am I justified in saying well 66 percent of the time I flip a coin it comes up heads? No, that is not really justifiable, I only did 3 flips. I find that if I did it 100 or 200 it would come out about 50/50. So we have to be careful that our samples, the students we look at, that it's an appropriate size. If you find that 8 out of the 10 people that you looked at defaulted on their loans, obviously you are not going to say "I forecast an 80 percent default rate this next year." That's just not appropriate. We have to be careful of unambiguous questions and answers. What about this hypothesis: Students that default on their loans are just lazy. Well, I am not going to ask you how many of you have thought that before. It's not really a good question. You can't really research that. What means lazy? Were they lazy in school? Maybe they didn't like academic work. Maybe they are hard workers. Maybe they are more into practical applications. It's just not a very well defined parameter. So when you are looking at your research that you would like to do about your students, it has to be specific. It can't be ambiguous.

Finally, control versus experimental groups. We are probably all kind of familiar with this. In a control group you have people who are doing the status quo, the normal, when you look at the results, what's going on with them. In an experimental group, you introduce something new. If you have a program that you want to introduce to your students...a default aversion program that you think is going to be helpful, the best thing to do is to randomly choose some students that would participate in that program and then measure the results. There is no way to really measure results if you just give it to everybody. Well, you could and you could say people are doing better but what if that is because of something else. What if it is because the economy is getting better? What you really want to do is have everything else equal and then take one group and do something different with them. And then measure the results. When we analyze data and again I am not going into how we do this, just that it is available this is, you know, a 30,000 foot view of this, there are all sorts of things we can do to tell us, descriptions about our students, percentages meaning mean, median, mode other descriptive

statistics that tell us ranges, standard errors, standard deviations. We can graphically show that in bar charts, pie charts, histograms.

I want to talk a little bit more about comparing groups. There is a term out there called statistically significant; let me go into a little bit about what that means. Anyone have a lottery ticket in here .... Who will admit to it? It's not a bad thing. Ok.... no lottery players in here. If you had a lottery ticket ... oh, Phil, you have a lottery ticket? Why don't you step in so everyone can see you...Phil is our resident lottery player over at MGA. Does it have the odds printed on it, your odds of winning? Ok, the new one. Ok, great plug. Thanks! What are your numbers? Could you tell us your numbers please? How many is that? Five or six?? So, its....ok. If I were to choose the numbers 1, 2, 3, 4, 5 are my odds any greater of me winning than Phil? Are odds the same if I just choose 1, 2, 3, 4, 5? Same odds, that's right. Now, let's say Phil goes out and buys 10 tickets and I just have my one. Are his odds greater that he is going to win? They are greater. Are they statistically significantly greater? No. Because the odds of winning the lottery are, like one in 126 million. I heard on CNN yesterday as I was sitting in Detroit airport that NASA has calculated that you are 250 times more likely to be killed by an asteroid than win the lottery. So, there you go, Phil, take that for what it is worth, I guess.

The point is that whenever we compare groups, there will be differences. Differences exist between different groups but the question will always be, is it statistically significant? Meaning, can we chalk up the difference to more than just probability? I don't know. Phil might have to buy thousands of lottery tickets in order for that difference to be statistically significant. When we look at two groups of students that we are comparing and there is a difference between them, we have to run an analysis to find out if the difference...how...what the chances are that that difference is just random or whether it really means something. And again, if you are interested in actually doing this, please contact me.

Guesstamating with confidence, that's really what it comes down to When you are trying to find some correlation, you are guessstamating here. We have things called confidence intervals that tell us what the majority of our sample fall into on a normalized bell curve. Many of you have probably seen something like this recently:. Granhom 45 percent / DeVos 41 percent with +/- three percentage points with a 95 percent level of confidence. What the heck is does all mean? What is means basically is that there is no statistically significant difference between the two. That 95 percent of the time people for Granhom ranged anywhere from 42 to 48, that's+/- 3 and for Devos, 38 to 44. There is an overlap there. There is no statistical significant difference there so it would be called a statistical dead heat.

This was a totally selfish way for me to put my children in the presentation. For those of you, many of you have asked about my children since I went to NASFAA. On the right there is Truman, my son, and on the left there is Sophia. Truman, is....brings up an interesting point about causation and correlation. Truman, used to, ah, well he still does, he is 16 months and still wakes up in the middle of the night and we still give him a bottle and I am sure that is our fault. But we do it anyway. But, every time I walk in the room, I turn the light on. Now, Truman, he could notice something there, a pattern that every time dad comes in, the light comes on so maybe Dad makes lights come on. Maybe Dad, he draws the conclusion that maybe Dad must be the source of light.

So...:=) ... I'm not even going to say anything there. But, the point is, no, I am not the source of light, there is actually something going on. I flip a switch and electricity is allowed to pass through to the light bulb and that is what turns the light on.

That happens a lot of times. People confuse the difference between the correlation and while there may be a correlation between me walking into the room and turning the light on that doesn't mean that I am the source of light. We do this... that happens all the time, so much that it is ridiculous. It happened to your neighbors to the southwest in Illinois. This was recorded in a lecture that I read from Stephen Levitz, Stephen Dovner, who actually wrote the book Freakconomics if you have ever read it. But they, in one of their lectures that I read, they talked about the governor there and he read a study that found there was a correlation between increased test scores, standardized test scores among high school students, and the number of books that were in their home. So he proposed a program, a 20 some million dollar program to the legislature that from when a child is born he was going to send them a book every month until they entered into kindergarten. Maybe it is a good idea and maybe it is not. But it does show a fundamental problem that books don't magically educate people, they don't through osmosis, the contents of the books don't enter into the child's brain. So while there was a correlation there, do books in a home cause people to score better on standardized tests? Probably not, there are other things that maybe the books represent and it requires more research to dig deeper.

We have to do the same thing in financial aid. We can't say because students withdraw, there is a correlation between students withdrawing and students defaulting on their loans. That withdrawal causes a default. That is a huge jump. To establish any type of causation requires a very specific research and a very strong corollary factor. It is almost impossible sometimes to figure out causation. But when we have correlation sometimes that is enough. So if we know that there is some correlation between students withdrawing and students defaulting, then perhaps we address the fact that they are withdrawing. Perhaps we find better measures of who is withdrawing and actually not going back to school or students who withdraw from the community college and then enroll into another college. Perhaps it brings up a need for us to be able to better track students. The point is that we can shape policy based on correlations as long as we understand that it is not necessarily the cost. We can't confuse the two. Here is the other thing I want to point out. In New York City they found that when they added more police officers to their police force that crime rates went up. Were the police officers causing the crime? No...What they found was that more police officers meant more crime was being reported. So we have to be careful that we don't misinterpret our research as well. It doesn't mean that police officers cause crime; it means that there is correlation. What's behind the correlation ... that is the question.

I talked earlier about a research project that MGA is doing with Eastern Michigan. One of the things that they are doing is looking at different students throughout the college....excuse me, throughout the different colleges and schools within EMU. So they are looking at to see, do social science majors have significantly different debt loads, perhaps, than science, excuse me, than engineering students or education students? Is one group more likely to use a deferment or forbearance? Is one group more likely to fall delinquent but then catch up? Is one group more likely to default than another group? And then perhaps we can find some inference or correlation that EMU

then can base some policy on and direct it to the students who need it most. If we find, for example though, that students in the education department that rack up \$30,000 or more in loans and then withdraw. Can we stay that that causes default? Again, no. Maybe there is a correlation there but it requires us to dig deeper.

This is the end result and maybe this is frustrating and maybe it's not. This is from Poul Alderson. I really like it. It says: "I have yet to see any problem, however complicated, which when you looked at it the right way, did not become still more complicated." When you get to the end of a research project, normally what you will find is the need for more research. And that hopefully that is not frustrating. It just says that you have answered a question and now there are more questions. And so it is perpetual. It doesn't end.

Yes, your survey. I wanted to just take a look at a couple of different things and figure out a little bit about you. I have a hypothesis about financial aid administrators and I wanted to see if they are confirmed in this room. Ok, the great majority of people in this room have a post secondary degree. Over 80 percent of you do not have any type of degree though in post secondary administration or higher education administration. How many of you thought that you would ....ok, let me go on to the next one. How many of you thought you that would work in financial aid? 96 percent of you said you never thought you would work in financial aid. But yet the median number of years that you have been in financial aid is somewhere....is around 15 years. With the maximum of 36 years ... who is that??? 36 years! Nobody...they don't want to say, ok. So what we have are a high number of people that didn't get degrees necessarily to be in higher ed administration who never thought they would be in financial aid but yet it seems the high majority of you have been in it for more than 10 years.

What does that say about us? I think it says a great deal and it is a hypothesis totally unfounded, no research done on this really, but because I think we make a difference, and because we help, and because really it is the right thing to do. I am a first generation college graduate in my family. And it means a lot to my family and it means a lot to my wife and it will mean a lot to my children. And I feel some responsibilities, I am sure you do, to give that back and to find a way to finance our students educations and then give them the tools to avoid the horrible consequences of default I think are part of our responsibly.

I thank you for your time and look forward to meeting with you later in the breakout sessions.